

Application No. 10/765,427

Attorney Docket No. 65,406-001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/765,427

Filing Date: January 27, 2004

Applicants: LaFave et al.

Group Art Unit: 1773

Examiner: Ramsey Zacharia

Title: DECORATIVE SYSTEM COMPOSITE AND METHOD

Docket No.: 65,406-001

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF THADDEUS W. KLIMEK UNDER 37 C.F.R. § 1.132**

Sir:

I, Thaddeus W. Klimek, hereby declare as follows:

1. Since 2004 to the present, I have been employed as a Market Development Manager, Specialty Automotive Products, for A. Schulman Inc., Birmingham, Michigan, where I am responsible for the product and market development of new thermoplastic polyolefins ("TPOs") and ionomer specialty polymers for injection molding, blow molding, extrusion and thermoforming applications for automotive exterior and interior components.

2. From 1998-2003, I was employed as a Senior Project Manager, Automotive TPOs and Specialty Polymers, at Equistar Chemicals, LP, Houston, Texas, and was responsible for the product and market development and original equipment manufacturer ("OEM") approval of a new series of high melt strength TPOs for extrusion and thermoforming. The resins are used for injection molding, blow molding, extrusion and thermoforming applications for automotive exterior and interior components.

3. From 1992-1998, I was employed as a Senior Project Manager/Associate Scientist, Polypropylene/TPO Development, at Millennium Petrochemicals, Inc./Quantum Chemical Co., Morris, Illinois, and was responsible for product

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development and technical marketing activities related to polypropylene ("PP") impact copolymers and TPOs, with emphasis on the automotive market, was the key developer of the Millennium Flexathene™ TPO technology and products, and participated in an international research exchange for the development of gas phase polypropylene process and product technology.

4. From 1979-1992, I was employed as a Section Manager, Polypropylene Pilot Plant operations and Product Development, at Enron Petrochemical Co., Morris, Illinois, and managed a department of twenty-seven professional and operations personnel in a pilot plant complex with an annual operating budget of \$2.6 million, where the unit developed novel polypropylene copolymers and TPOs for domestic and foreign applications.

5. From 1973-1979, I was employed as a Development Specialist, Polyethylene, at Northern Petrochemical Co., Morris, Illinois, and was responsible for the commercial process support and product development of high-pressure, low-density polyethylene ("LDPE") products for film, blow molding, injection molding and wire and cable applications using BASF™ tubular reactor technology.

6. From 1971-1973, I was employed as Polymer Characterization Specialist, Polyethylene, also at Northern Petrochemical Co., Morris, Illinois, and was responsible for the commissioning and development of a polymer characterization laboratory for the analysis of LDPE structure, molecular weight distribution, long chain branching estimation, solution and melt viscosity characteristics, and the like.

7. In 1978, I was awarded a Master of Science degree in Polymer Chemistry/Computer Science from Roosevelt University, Chicago, Illinois.

8. In 1973, I was awarded a Bachelor of Science degree in Analytical Chemistry/Mathematics from Roosevelt University, Chicago, Illinois.

9. I am a named inventor on the following U.S. patents: (1) U.S. Patent 5,314,746, entitled "Soft Puncture and Tear Resistant Polyolefin Films of Ethylene-Propylene Copolymer," issued May 24, 1994; (2) U.S. Patent 5,422,386, entitled "Process to Simultaneously Reactor-Fill and Compatibilize Fillers with Polyolefins," issued June 6, 1995; (3) U.S. Patent 5,587,436, entitled "Process for Controlling the Polymerization of Propylene and Ethylene and Copolymer Products," issued December 24, 1996; and (4) U.S. Patent 5,705,576, entitled "Process for Controlling the Polymerization of Propylene and Ethylene and Copolymer Products," issued January 6, 1998.

10. I have presented and/or published technical papers at the Society of Plastics Engineers ("SPE") TPO conferences, SPE Annual Technical ("ANTEC") conferences, Shotland TPO conferences, Society of Automotive Engineers ("SAE") conferences, and ECM Automotive TPO conferences.

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11. I have been a member of the Board of Directors of the Thermoplastic Materials and Foams Division of the Society of Plastics Engineers since 1991, and I have served as the Chairman since 2002 to the present.

12. I am a member of the Society of Plastics Engineers, the Society of Automotive Engineers, the Association for Computing Machinery, the American Statistical Association, and the IEEE Computer Society.

13. I have assisted the applicants of the above-referenced U.S. patent application from time to time since November, 2000, while I was employed in my official capacity with Equistar, in connection with the development of TPOs compatible with paint film lamination and thermoforming processes for automotive and other applications.

14. I have reviewed the above-referenced U.S. patent application and completely understand it, particularly with respect to the disclosure of the thermoformable substrates, including TPOs and acrylonitrile butadiene styrene copolymers ("ABS").

15. I have an intimate knowledge of the manufacture of TPOs as evidenced, in part, by the fact that I am a named inventor on the four U.S. patents listed in Paragraph 9, above. I also have an intermediate level of knowledge of the manufacture of ABS, as it was a product distributed by my current employer, A. Schulman, Inc.

16. It is my understanding that both ABS and TPOs are copolymers containing a dispersed rubber phase that enhances their properties, that is, impact strength and low temperature fracture resistance. In the case of TPOs, the components are polypropylene, polyethylene and an ethylene-propylene rubber ("EPR"). In the case of ABS, the components are acrylonitrile, styrene and a butadiene rubber phase.

17. It is my understanding that one disadvantage to this rubber modification is the reduction of transparency to the point of the TPOs and ABS being translucent to semi-opaque, depending upon the amount of rubber phase added to the polymer system. The rubber phase particles effectively scatter or bend transmitted light passing through the polymer system to the extent that very little light escapes the surface.

18. It is my understanding that commercial grades or variations of ABS and TPOs are very often combined with mineral fillers such as talc or glass fibers that further enhance properties such as stiffness and the ability to retain their shape under load; however, these mineral additions result in polymer systems that are opaque.

19. It is my professional opinion that the TPOs and ABS polymers disclosed in the above-referenced U.S. patent application would be understood by one of ordinary skill in the art to be translucent to semi-opaque in their unfilled forms and completely

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opaque in their filled commercial forms.

20. I further declare that all statements made herein of my own knowledge are true and that all statements made herein on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements are the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

May 1, 2006  
Date

Thaddeus W. Klimek  
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